

GUIDELINES FOR OPEN SPACE PLANNING AND MANAGEMENT



*Morgan Territory Regional Preserve
—View of Mt. Diablo*

 **EAST BAY
REGIONAL PARK
DISTRICT**

**East Bay Regional Park District
Board of Directors - 1991**

James H. Duncan
Harlan Kessel
Jocelyn Combs
Oliver Holmes
John O'Donnell
Ted Radke
Carroll Williams

Pat O'Brien
General Manager

00 01084

GUIDELINES FOR OPEN SPACE PLANNING AND MANAGEMENT

East Bay Regional Park District



Digitized by the Internet Archive
in 2025 with funding from
State of California and California State Library

<https://archive.org/details/C124922212>

TABLE OF CONTENTS

	Page
INTRODUCTION	3
KEY CONSIDERATIONS FOR PLANNING OPEN SPACE	6
GUIDELINES FOR DESIGN, OPERATION AND MANAGEMENT OF OPEN SPACE	12
Guidelines Preparation	19
Appendix A - Glossary	20
Appendix B - East Bay Regional Park District Master Plan Policies	22
Appendix C - East Bay Regional Park District References For More Detailed Information	22
Map of the East Bay Regional Park District System	Back Cover

" With the growth of a great metropolis here, the absence of parks will make living conditions less and less attractive, less and less wholesome. Insofar, therefore, as the people fail to show the understanding, courage, and organizing ability necessary to grasp the present opportunity, the growth of the region will necessarily tend to choke itself."

—Olmsted and Hall, *Proposed Park Reservations for East Bay Cities*, 1930.

Since 1936, with the establishment of the first three regional parklands in the hills above the East Bay, the course of the East Bay Regional Park District has been set in response to the needs of a continually expanding population. The Regional Park system now encompasses more than 69,000 acres of land, including 47 regional parklands, 11 regional trails, and 1000 miles of interconnecting trails.

Today, the District continues its primary role by providing regional recreational opportunities and preserving a complex system of open space resources for the citizens of Alameda and Contra Costa Counties. The East Bay Regional Park District works actively with citizens and public agencies of the 2 counties, 32 cities and 5 special districts encompassed by our jurisdiction and advocates sound land stewardship practices and the resolution of issues of open space operation, management and financing.

These Guidelines are offered in the spirit of continuing cooperation.



Mt. Diablo State Park lies at the core of a unique complex of contiguous open space owned and managed by state, regional and various local agencies.

INTRODUCTION

Alameda and Contra Costa County are two of the most rapidly-growing counties within the greater San Francisco Bay Region. They form the eastern edge of the Bay, spanning from Fremont in the south to the Carquinez Strait in the north. In the past ten years, the population has grown from 1,761,710 to 2,082,914, a 19% increase. All demographic projections for the coming decade indicate similar rates of population growth.

The San Francisco Bay Area is also a region of unparalleled natural beauty. The vast, open expanses of the Bay are surrounded by dramatic and rugged hillsides which, in turn, frame the cities and towns.

Today, most of the relatively flat lands of the Bay plain and inland valleys have been developed — growth pressures, coupled with advances in engineering technology, are now pushing development into steep and often unstable hillsides. Thousands of acres of formerly “undevelopable” lands are now being mass-graded and re-contoured for residential development. Yet, despite this urbanization, significant open space resources persist. Local governments and developers alike must now consider the fate of these remaining lands.

California cities and counties are given the responsibility for land use control through General Plan law and the Subdivision Map Act. Many local planning commissions and staff are experienced at reviewing development in the context of zoning ordinances to provide facilities such as roadways, fire stations, schools and parks. In this traditional review process, layout and patterning of improvements are the primary focus. Open space is often viewed as



Hillside subdivision. Contra Costa County, California

“leftover” land that cannot be allocated to some other municipal use, rather than an inherently valuable community resource and a necessary form of infrastructure.

Often in our two-county area, the East Bay Regional Park District is asked to accept dedications of these undeveloped lands. Some lands are accepted, but in many cases, the District declines because of maintenance and liability concerns. These hard-to-manage open spaces then become the responsibility of homeowner’s associations or local governments who may not be well-equipped to provide for their perpetual care.

The values and functions of open space are many and varied. In California, General Plan Law comprehensively defines open space as having the following values:

- Open space for the preservation of natural resources, including plant and animal life; wildlife habitat; areas required for scientific study; rivers,



Hikers enjoying Bishop Ranch Open Space near San Ramon.

streams, bays and estuaries; coastal beaches, river and stream banks and watershed lands.

- Open space for the preservation of land used for the managed production of resources, including agricultural lands, rangeland, and forest lands; and areas required for the recharge of ground water basins.
- Open space for the preservation of scenic quality and visual landmarks; provision of recreational activities such as hiking, bicycling, horseback riding, fishing; and education through interpretation.
- Open space for public health and safety purposes, including areas which require special management because of hazardous or special conditions such as flood plains, unstable slopes, lands with high fire risk and areas required for the protection of water quality.

Planners also recognize an additional value. Open space helps to shape and define urban growth by encouraging more effective and efficient use of existing urban areas.

The following Guidelines for Open Space Planning and Management describe successful practices and policies that have evolved over the years at the East Bay Regional Park District, many of which were pioneered by the District's Land Acquisition Department. The Guidelines are presented here as a reference tool for planners, citizens and property owners. We hope that they will assist local government to plan pro-actively for practical, attractive and sustainable community open space at the earliest stages of the development review process, not after development

entitlements are already established.

The specific purposes of these Guidelines are to:

- Provide local and regional planners, developers and citizens with information on the importance of open space planning and management.
- Increase awareness of open space as an important factor in the layout and patterning of development.
- Provide a set of suggested criteria for the protection of

open space areas.

- Encourage dialogue and consolidate efforts between local and regional planning agencies in order to protect open space and provide recreational opportunities for present and future residents.

This document is not intended to be a textbook on open space protection or a substitute for more detailed or site-specific studies. While the specific focus of these Guidelines relates to hillside development in the

San Francisco Bay Area, it is hoped that the key principles will be transferable to other geographic localities where open spaces may consist of wetlands, forest lands or river corridors. Within our jurisdiction, the East Bay Regional Park District is receptive to discussing the merits of specific parcels with landowners and planners; however, adherence to the Guidelines does not imply that the District will assume responsibility for the management or operation of protected open spaces.



Open space provides opportunities to maintain and experience rural traditions.

KEY CONSIDERATIONS FOR PLANNING OPEN SPACE

Local planners are well versed at evaluating new development and proposed active park and recreation facilities within existing communities. However, planners and decision-makers are less familiar with evaluating the impacts of development on adjacent open space. The following chapters will familiarize agencies, hillside property-owners and developers with typical problems that occur along urban/open space boundaries and with possible solutions to minimize these problems.

Identify Landslide, Erosion and Slope Hazards

Landslide, erosion and slope hazards do not stop at subdivision boundary lines. Therefore, it is imperative that local planners consider hazards on "open space" lands. Before a public agency approves development in potentially unstable terrain, it is important that the landslide, erosion and slope hazards be clearly mapped and understood, both for the proposed development site and for the adjacent open space lands. This information is best made available in an environmental impact report or in an "opportunities and constraints" report in the early stages of the planning process.

Residential development on steep slopes often requires radical changes to the natural contours of the land and necessitates maintenance of slope improvements. Such development can activate landslides or increase the potential for erosion and slope failure along common boundaries with parkland and open space, increasing the risk of damage to subdivision improvements.

The most prudent action to protect against geologic hazards and

associated liability problems is to restrict development in landslide-prone areas. If development in these areas is permitted and open space is offered to a public agency, it may be necessary to adjust the property line between the development and the open space to create a privately-owned buffer zone, with the responsibility for all landslide repair and maintenance resting with a Geologic Hazard Abatement District or a

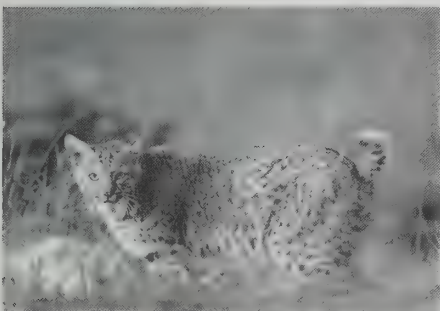
Homeowners Association. The buffer zone should include all engineered slopes and drainage structures. The complex engineering required to accommodate development in unstable areas requires rigorous maintenance of all drainage and slope improvements. The costs for maintenance and improvements should be borne by those property owners who benefit from their installation.



Wildland fires destroy thousands of homes each year. Consideration of wildfire in development review can reduce the risks to life and property.



Access is critical to fighting wildland fires.



The protection of wildlife habitat and the designation of land corridors for movement is critical to the survival of animals like the Bobcat.

Identify Wildland Fire Hazard Areas and Designate Emergency Access

Prudent planning of the urban/open space boundary can significantly reduce the potential losses due to wildland fires. Yet, many cities and counties give little or no consideration to wildland fires in development siting. The behavior, intensity and characteristics of wildland fires differ greatly from fires in urbanized areas. In wildland fires, the pattern of development, in combination with topography and vegetation, become major factors in controlling damage to life and property.

In California, an average of 10,000 wildland fires occur each year, destroying natural resources, life and property. In August 1990 alone, 1,300 wildfires resulted in 261,000 acres burned in California, at a fire suppression cost of \$40 million. As more people move to the State's fire-prone "wildland/urban interface" areas, the corresponding risk to life and property increases.

Local planning agencies should identify areas of high fire hazard and determine whether development should occur in these areas. For example, development may not be prudent in abrupt topography such as saddles or ridges upwind of heavily vegetated canyons, where homes are particularly prone to significant fire damage. Where development is allowed, fire fighting staging areas and emergency access routes should be designated. Providing emergency vehicle access is critical to fire protection. Fire lanes and roads can also function as police and maintenance access routes. Access is extremely difficult to improve or provide after development is complete.

Reduction of fuel loads in open space areas adjacent to development is another key factor in minimizing fire risk and requires maintenance and vigilance. A number of techniques are used by public agencies to control flammable vegetation on open space lands, including livestock grazing, prescribed burning and hand removal. Planners should recognize that some of these maintenance functions may be incompatible with nearby housing and that some vegetation modification programs can trigger slope instability.

Protect Wildlife Habitat and Wildlife Corridors

Each year in California, urbanization accounts for the loss of thousands of acres of wildlife habitat. Moreover, urban/suburban development degrades wildlife habitat by fragmenting large, contiguous areas with barriers to animal movement such as roadways, fences and pipelines. As a result, wildlife, such as deer, raccoons and even foxes, are often forced into residential areas where their presence can create problems for the community.

The protection of wildlife habitat and endangered plants and animals has recently become a great concern of local citizens. Protection of animal species and designation of land corridors to facilitate animal movement is a conservation practice that has been used in our state and national parks. Such practices should be incorporated into regional planning as well. Planners and decision-makers at all levels are being pressured by local citizens to address these ecological issues.

Land-use planners can identify and implement simple project modifications in the development

review process that can greatly enhance wildlife protection. Wherever possible, developed facilities should be located where they would not significantly interfere with the movement of wildlife species. Where significant barriers to wildlife corridors, such as roadways and utility lines cannot be avoided, structural connections such as bridges or culverts may be considered to accommodate continued movement.

Provide for Large, Contiguous Units of Open Space

Once the aforementioned high hazard and significant habitat areas have been identified as not suitable for development, the local planning agency has an opportunity to refine these open spaces into a usable, manageable and valuable community resource. As a general principle, large unbroken areas of open space are more valuable for both recreational

uses and habitat protection than fragments of open space surrounded by development.

To create optimal open spaces, local planners should identify open space that has local and regional significance due to environmental, scenic or recreational values. In most cases this information is already available in the conservation and open space element of the local general plan.

Wherever possible, a variety of terrain and vegetation should be selected for protection. The ultimate size and configuration of the open space should maximize opportunities for connections to surrounding parks, public facilities, open space and trails. Areas especially suited for open space protection are riparian corridors, oak woodlands and ridgetops. Riparian corridors are essential to the long-term health of entire watersheds and are critical corridors that allow wildlife movement from one important habitat to another. Oak woodlands exist in a "mosaic" with other plant communities and provide habitat for a diversity of wildlife species. Ridgetop open space corridors are visually appealing, provide a separation between open space and development and can provide links to other adjacent public lands.

When open space is evaluated in this way and configured into a cohesive unit rather than a collection of "left-over" spaces, the multiple benefits provided by the whole is greater than the sum of the parts.

Plan for Logical, Definable Boundaries at the Urban/ Open Space Interface

As noted above, development configurations and property lines



Islands of fractured open space are susceptible to wildfires, as seen on the slope (at center) below ridgetop homesites.

adjacent to open space should be located to minimize the fragmentation of open space. Fingers of development which intrude into adjacent open space may seem appealing to future homeowners, but can create major public safety hazards as well as open space and wildlife management problems. In addition, islands or narrow strips of left-over open space which are surrounded by development are difficult and costly to maintain. It is these on-going maintenance costs that are too often overlooked in the development review process and which can be significantly reduced by the appropriate siting of development.

- **Cluster development**

Avoid development patterns that spread throughout the open space even though the density of development may be very low. By setting aside large blocks of open space and clustering the development, the same number of units can be achieved while providing significant open space amenities for all homes. This can often provide the same value-added economic return of low density "spread" development. Development costs can often be significantly reduced with clustering by minimizing grading and the expansion of infrastructure for water, sewer and roads.

- **Designate a "buffer zone"**

A buffer zone is an area of privately owned open space which separates residential development from publicly-owned parkland and open space. A buffer zone provides a clearly defined and specially managed transition area between individual house lots and public open space.

Buffer zones should be designed



Fingers of development that encroach on open space create public safety and land management problems.



Treatment of open space differs in two adjoining subdivisions. In the foreground, clustering of units allowed the slopes to remain open, while in the background, development has created open space islands and complex landslide hazards.



A railroad once occupied the corridor (right of center) where East Bay Regional Park District's "Iron Horse" trail will soon provide the backbone of a regional system that will connect larger parklands like Las Trampas (in the distance) with surrounding communities. The Contra Costa Canal Trail, another unique utilization of a long distance corridor, crosses the future trail near the bottom of this view above Walnut Creek.



This fire trail was paved to the depth of an adjacent lot and left open for low impact off-street parking. Informational sign boards greet hikers within the gates.

to minimize operational costs to the open space agency, ensure public safety, protect personal property and preserve valuable natural resources. They should also provide a privacy separation between public recreation activities and residential uses.

Plan for Public Access, Trail Systems, and Staging

Trail use is one of the fastest growing segments of public park and recreation activity. Trails are linear parks or corridors that are primarily for pedestrian, equestrian and bicycle use. Trails can be either regional or local and can serve as transportation alternatives for children going to school and even for commuters.

Regional trails can link regional parks to local trails, employment centers and community facilities.

Local trails and trail access points serve local residents and provide pedestrian access for users to public open space. Typically, parking is not provided at local trail access points, although on-street parking may exist as part of a subdivision. Development plans should identify opportunities for linking local trails with regional trails and public open space. Whenever possible, trails should be integrated with natural landscape features, such as creeks and ridgelines.

Potential barriers to public access that may interfere with key trail linkages should be addressed early in the planning process. Where roadways or other developed facilities inhibit public access, alternative methods of passage, such as grade-separated crossings or pedestrian bridges should be considered.

The provision and location of regional staging areas is a critical issue related to development of trails and open space. Staging areas are essential facilities for the assembly of trail users and for parking cars and accessory vehicles such as horse trailers. At a minimum, regional staging areas should provide parking, rest rooms, and park information panels. Regional staging areas should be located where they are easily found and maintained, but not where they would intrude on nearby residents.

Consider Financing Mechanisms for Open Space Operation and Management Costs

Regardless of who owns open space lands, there will be maintenance costs. In many cases, developers offer

to dedicate their open space to a public agency to avoid this responsibility. There are many issues that local agencies should consider when deciding whether to accept a potential dedication, including the amount of public benefit, liability and maintenance costs. If the foregoing planning considerations are followed, public benefits can be maximized while operational costs minimized.

Maintenance and liability costs will be influenced by the amount of land dedicated, the proximity to developed areas, the type of facilities provided and the presence of fire or geologic hazards. Costs can vary substantially depending on maintenance requirements for fuel reduction, the level of recreational activity anticipated in the open space and the ease of access and proximity to other publicly maintained facilities.

It is critical that the costs of open space maintenance are not overlooked or underfunded. Some of the funding mechanisms used by cities, counties and special districts to address maintenance and operational costs include general fund revenues, special assessment districts, homeowner associations, or geologic hazard abatement districts. In the case of assessment districts and homeowner associations, revenues are collected through an annual assessment on all properties which benefit from the services and/or improvements provided. These funding mechanisms should be addressed at the time a development is approved.



This discrete trail between homes integrates the open space into this neighborhood, providing amenities while avoiding any impacts of a concentrated single entrance.

GUIDELINES FOR DESIGN, OPERATION AND MANAGEMENT OF OPEN SPACE

The following guidelines will assist public agencies to evaluate the desirability and feasibility of accepting open space dedications and should be taken into account at the earliest stages of development review. Many of the recommended guidelines may be included in the conditions of subdivision approval.

While each potential public open space will need to be evaluated independently, some standards can be applied that will make open space easier to maintain, more cost-effective to manage with less liability, while protecting public safety and natural resource values.

Resources Management

Landslide, Erosion and Slope Hazard

- Consider the potential impacts of grading on adjacent public open space. Mass grading of steep hillsides for roads and homesites can exacerbate landslide and erosion activity



Extensive grading of hilltop open space.

between the urban areas and the open space. These potential impacts in turn make operation and management of the public open space more difficult and costly.

Example: In certain circumstances, the California Government Code (Section 831.25) provides immunity to public agencies from damage claims arising from land failure on unimproved public property as long as the land is left in its natural condition.

Example: The East Bay Regional Park District has declined ownership of open space where an identified landslide could cross a common boundary and damage improvements.

Example: The East Bay Regional Park District will usually decline ownership of land which has been graded, engineered or contains structural improvements such as drainage ditches or culverts.

- Consider creating a Geologic Hazard Abatement District to transfer the responsibility for slope improvements and landslide repair to affected property owners (CA Govt. Code, Sect. 26500). Do not include publicly-owned open space within the boundaries of the geologic hazard abatement district.

Example: The East Bay Regional Park District has declined to accept open space lands located within an existing geologic hazard abatement district (GHAD) because of concerns about the added administrative burden and potential monetary assessments that could be levied against it.

Fire Hazard Prevention and Emergency Access

- Firebreaks are specialized buffer zones that pay particular attention to fuel modification to protect public safety and personal property. Where local conditions or local fire authorities require the establishment of a firebreak, it should be placed between the fence line of the development and the open space boundary and should have a minimum width of 50 feet (see Figures 2 and 3.)

- Increase the width of the firebreak based on topographic conditions and height of flammable vegetation (see Figure 1.)

- Require the preparation of a vegetation management plan which establishes types of landscaping which should be allowed in the firebreak and proposes fire risk reduction measures. The plan should be reviewed by the appropriate fire authorities.

- Establish emergency and maintenance vehicle access lanes and access points for police, maintenance and public safety purposes. The design of emergency access points and trail gates should be consistent with standards of local fire departments and the agency responsible for open space maintenance (see Figure 3.)

- Provide fire hydrants at designated fire lane access points.

- Establish parkland/open space closure policies and practices that can respond to fire hazard conditions.

Figure 1

FACTORS INFLUENCING WIDTH OF FIREBREAK

Slope of Land

0 - 15%

16 - 35%

36% and above

Added Width

1 times height of vegetation

1.5 times height of vegetation
(not to exceed 300 feet)

2 times height of vegetation
(not to exceed 300 feet)

(Source: East Bay Regional Park District Fuel Break Plan - 1989)

Example: The East Bay Regional Park District has recommended that 12 to 14-foot wide drivable fire lanes be installed for emergency and maintenance vehicle access from the public street to the public open space fenceline.

Example: The East Bay Regional Park District has recommended that access points to fire lanes should be a minimum of 1,500 feet apart.



A specialized buffer zone or "firebreak," adjacent to Anthony Chabot Regional Park, is grazed by goats.

Figure 2

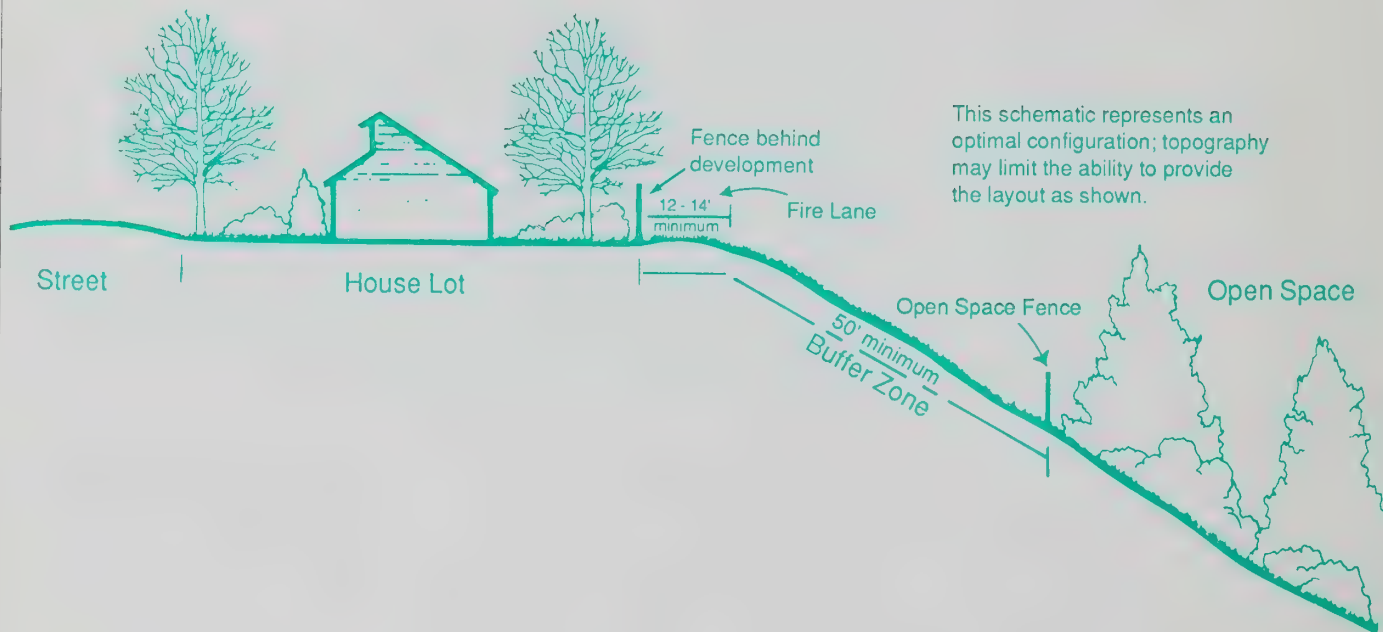
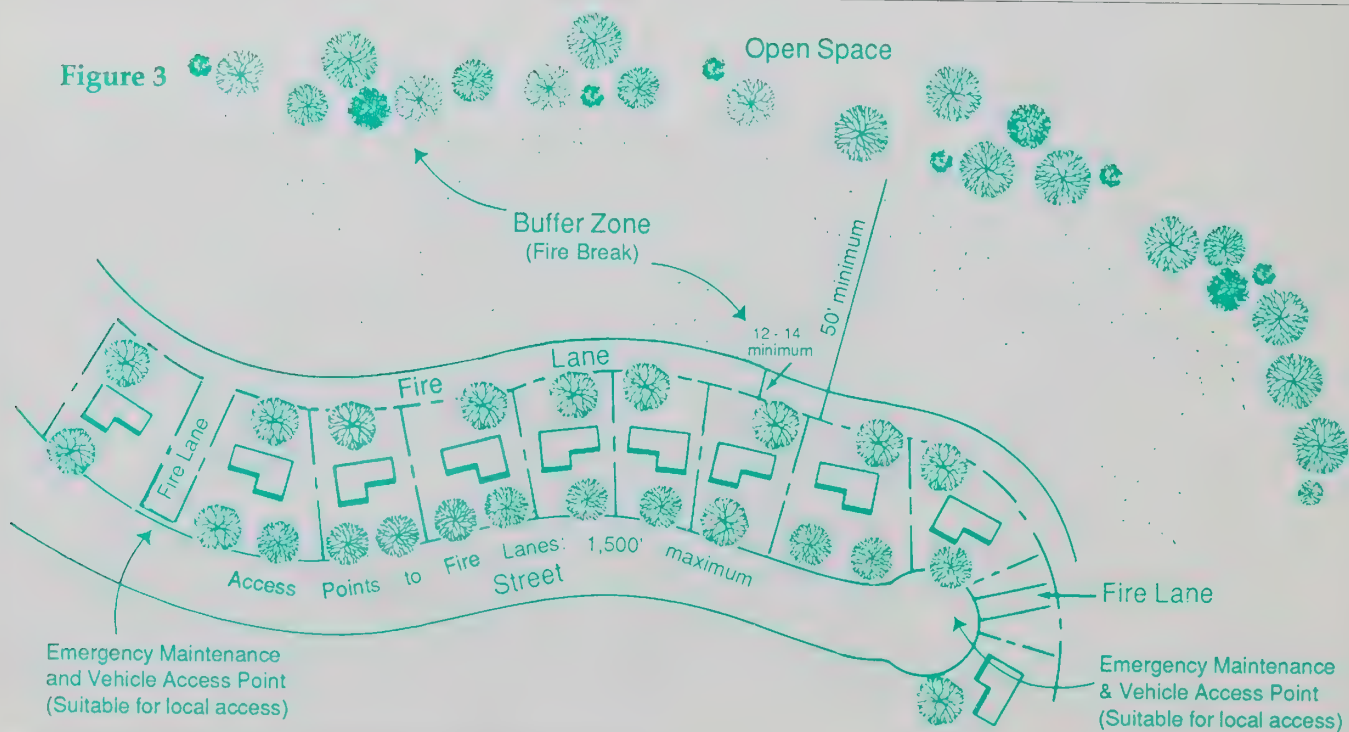


Figure 3



Figures 2 and 3: Schematic design of buffer zone and emergency maintenance access.

Size of Open Space and Configuration with Development

Buffer Zone

- As standard practice, a privately-owned and maintained buffer zone should be provided between the development and any public open space (see Figure 2.)

Example: East Bay Regional Park District has requested that a minimum 50-foot buffer be established that separates public open space from the private homes and structures in the development. The width of the buffer zone is determined on a site-specific basis and could be wider or narrower than 50 feet.

Parcel Size and Location

- Combine smaller, fragmented open space parcels to create larger, more manageable open space units and to facilitate connections between other regional open spaces and community parks.

Example: The East Bay Regional Park District Master Plan (1989) defines a minimum manageable unit as 200 acres where not adjacent to an existing parkland.

Development Pattern and the Open Space Boundary

- Avoid or minimize the intrusion of “fingers” of development surrounded by open space. Avoid or minimize narrow, left-over strips of open space surrounded by development. Both of the above configurations are difficult to manage, costly to maintain and difficult to protect in a wildland fire.

- Restrict homes to one side of the street (single-loaded) where development abuts wildland open



Single loaded streets allow for important fire management buffers while providing “visual access” for the entire subdivision.

space. This reduces fire hazard, improves emergency vehicle access and makes the open space visually accessible to the entire community.

- Exclude water tanks, drainage improvements and other such structures from public open space; minimize visual impacts of such structures through appropriate siting and screening.

Trails and Staging

Trails

At a minimum, trails are narrow corridors that provide critical linkage to important facilities. However, trail corridors can also incorporate many hundreds of acres of significant open space and provide the public with unique opportunities to enjoy the natural environment separated from developed areas.

- Designate trail rights-of-way that are wide enough to accommodate the designated uses, that provide a buffer between the trail itself and

adjacent development, and that allow access for both emergency and maintenance vehicles.

Example: The East Bay Regional Park District applies the following **minimum** standards for trails:

Single or double-use trail that permits hiking and/or equestrian use, provide a minimum right-of-way width of 20 feet.

Multiple-use trail that permits hiking, equestrian and bicycle use, provide a minimum right-of-way width of 30 to 40 feet.

- Designate wider trail corridors wherever possible to include sensitive resources, unique natural features or vista points.

- Trail rights-of-way can occupy the same easement as emergency and maintenance vehicle access and utility easements.

- Consider installing grade-separated crossings to regional trails and open space where major roadways or other infrastructure create barriers.

- Designate parallel trails where necessary to accommodate a variety of uses.

Staging

- Provide local trail access points that encourage neighborhood access

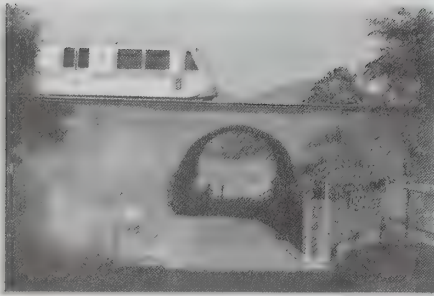
to the open space trail system.

Example: The East Bay Regional Park District has requested that multiple access points be located between residential lots or at ends of cul-de-sacs for open space access.

- Regional staging areas are signed parking sites off public roads for passenger vehicles and horse trailers and provide facilities such as drinking water, restrooms and telephones.

- Existing parking lots should be identified and used for staging to avoid duplication of staging facilities.

Example: A planned segment of the East Bay Regional Park District's Las Trampas to Mt. Diablo Trail will include a



Careful advanced planning preserves public access under major trail obstacles such as transit corridors, freeways, or major new arterials.



Staging areas should reflect the needs and number of intended uses.

pedestrian and equestrian trail link through a local city park, where a cooperatively developed staging area will provide parking for 12 cars and 5 horse trailers.

- **Regional** staging areas should also provide gates and fencing, as well as fire hydrants and fire truck turnarounds, that address specific needs of police and fire departments.

- **Regional** staging areas are located in areas that are both convenient to the public and that are easily accessible for maintenance and operation purposes.

Operations and Public Safety

- Livestock grazing is a standard open space management technique employed by some public agencies to control flammable vegetation. Agricultural fencing, livestock loading areas and a supply of water are key physical requirements for livestock operations.

- Require agricultural-level fencing on all perimeters of the open space and along the boundary between the open space and privately-owned buffer zone. Existing perimeter fencing that is still standing may be sufficient; however, new fencing will probably be necessary between the buffer zone and the public open space.

- Select appropriate types of fencing based on the individual needs and aesthetics of the site.

- Fencing and gating should be provided by the developer and be in place before the open space dedication is accepted by the public agency.

- Water service hook-ups (stub outs) should be provided by the developer to service the open space uses and should be located near emergency access points and clear of the back of curbs and sidewalks.

- Agencies responsible for wildland fire protection and police patrol should be identified and involved early in the planning process.

- Establish multiple-agency agreements for fire, police and emergency response. Designate a lead response agency and establish a clear chain of command.

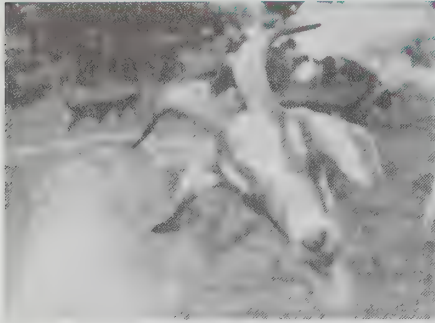
Financing

- Estimate both start-up and annual costs for open space and trail maintenance.

Example: In 1989, the East Bay Regional Park District estimated that the cost per acre for the 372-acre Bishop Ranch Open Space was \$78.00. This small park is bounded by development on one side and contains a small staging area and trail system only. This cost included administration, management, operations, public safety and overhead. Depending on the site attributes and the configuration of the open space, operations



Well-designed bridges provide safe creek crossings while maintaining essential riparian wildlife corridors. This developer-supplied bridge provides access for residents to the adjacent open space.



Goats can also be used to reduce fuel loads in brushy areas.

and maintenance costs could range from \$30/per acre to \$400/acre.

- Consider and establish appropriate assessment districts to fund the cost of maintenance and operation of open space, including landscape and lighting districts, geologic hazard abatement districts and homeowner associations.

Example: In 1990, a Landscape and Lighting District was established to cover the costs of maintenance and operation of 258-acres of open space that were dedicated to the East Bay Regional Park District by the developers of a 960-unit subdivision situated in rugged hillside terrain. The District determined an approximate per acre cost for maintenance. While the initial costs of the assessment district will be borne by the developer, the annual fees will eventually be passed on to the residents of the

subdivision. The annual assessment for each property owner will vary depending on the size of the residence, but was estimated to be approximately \$40/unit/year.

- Consider contracting with community resource groups such as the Conservation Corps. Typical tasks that these groups perform range from constructing fences or rock walls to clearing vegetation and repairing or developing trails.

Example: The East Bay Regional Park District has year-round and short-term contracts with the East Bay Conservation Corps to complete capital improvement projects and trail development and improvement work. Each year, the District allocates capital funds to cover several weeks of contract work for each identified park, open space or trail. Typical costs for hiring Conservation Corps crews are approximately \$3,500 per week for a 8-person crew.



Grazing provides useful fire management while maintaining rural traditions.

ACKNOWLEDGMENTS

These guidelines draw from the experience of the East Bay Regional Park District, cities, agencies, and individuals in the ongoing effort to provide liveable communities in a unique but rapidly developing landscape. All of us owe a great debt to the foresighted individuals — public officials and planners, developers and environmentalists who have risen to the challenge of finding a common ground for all of us.

Guidelines Preparation

Report Authors

T.H. Mikkelsen	Assistant General Manager Planning, Design and Stewardship
Maxine Turner	Chief of Planning
Andrea Mackenzie	Park Planner

Report Assistance

Kelly Tovey	Planning Technician
Sarah Marvin	Planning Technician
Linda Faria	Secretary

The cooperation of Pat O'Brien, General Manager, and his staff and the Park Operations & Interpretation and Public Safety Departments is gratefully acknowledged. The authors would like to thank Janet Cobb, Assistant General Manager Public Affairs; Lane Powell, Publications Coordinator; Kevin Shea, Chief, Land Stewardship; and Lloyd Wagstaff, Land Acquisition Manager, for their invaluable assistance.

Photography

Bob Walker
Michael Sewell

Graphic Design

Carol John, Geranium Graphics

Your comments and suggestions on **Guidelines for Open Space Planning and Management** are welcome. Please contact:

Parkland Planning Department
East Bay Regional Park District
2950 Peralta Oaks Court
Oakland, CA 94605
(510) 531-9300

June 1991

APPENDIX A

Glossary

Assessment District. A financing mechanism for providing public infrastructure. Bonds may be issued to finance improvements, subject to repayment by assessments charged against the benefitting property owners. An assessment district enables property owners in a specific area to cause the construction, operation and maintenance of public facilities by contributing their fair share of the operating costs.

Buffer Zone. An area of land separating two distinct land uses that acts to soften or mitigate the effects of one land use on the other.

Community. An assemblage of plants and/or animals in a given area in which the various species are more or less interdependent upon each other.

Dedication. The turning over by an owner or developer of private land for public use, and the acceptance of land for such use by the government agency having jurisdiction over the public function for which it will be used. Dedications for roads, parks, and school sites often are made conditions for approval of a development by a city or county.

Density, Residential. The number of permanent residential dwelling units per acre of land.

Easement. Usually the right to use property owned by another for specific purposes or to gain access to another property.

Easement, Conservation. A tool for acquiring open space with less than full-fee purchase, whereby a public agency buys only certain specific rights from the land owner. These may be positive rights (providing the public with the opportunity to hunt, fish, hike, or ride over the land) or they may be restrictive rights

(limiting the uses to which the land owner may devote the land in the future.)

Easement, Scenic. A tool that allows a public agency to use an owner's land for scenic enhancement, such as roadside landscaping or vista preservation.

Ecological. Pertaining to the interrelationship of living things to one another and their environment.

Environmental Impact Report (EIR). An assessment of a proposed project or activity to determine whether it will have significant environmental effects on the natural and manmade environments.

Firebreak. A strategically located natural or artificial barrier of varying width, used to prevent or retard the spread of fire.

Fire Hazard Zone. An area where, due to slope, fuel, weather, or other fire-related conditions, the potential loss of life and property from a fire necessitates special fire protection measures and planning before development occurs.

Fuel Load. The quantity of fuel expressed in terms of weight per unit area of land.

General Plan. A compendium of city or county policies regarding long-term development, in the form of maps and accompanying text. The General Plan is a legal document required of each local agency by the State of California Government Code Section 65301 and adopted by the City Council or Board of Supervisors.

Geologic Hazard Abatement District (GHAD). A GHAD is a political subdivision of the state, formed for the purpose of prevention, mitigation, abatement, or control of a geologic hazard, including but not limited to the acquisition of property, construction, or the maintenance,

repair or operation of any improvements, or the issuance and servicing of bonds issued to finance improvements. A GHAD is comprised of an area within a local agency which is specially benefitted by, and is subject to a special assessment to pay for the costs of improvements.

Grazing Unit. An area of rangeland which is managed as an entity for livestock grazing.

Greenbelt (Greenway). Open space, rangeland, farmland, forest and wetland on the edge of an urbanized area and not serviced by urban infrastructure.

Groundwater Recharge. The natural process of infiltration and percolation of rainwater from land areas or streams through permeable soils into water-holding rocks that provide underground storage.

Habitat. The physical location or type of environment in which community organisms live or occur.

Homeowner Association. An association of residents which assesses each resident his or her share of the cost of management of common open space areas.

Infrastructure. Public services and facilities, such as sewage-disposal systems, water supply systems, other utility systems and roads.

Integrated Pest Management (IPM). The application of broadly based biological, sociological, and economic concepts in managing pest problems.

Landscape and Lighting District. A special assessment district, authorized by the California State Legislature in 1972, which can raise funds to acquire land and install, maintain, and service public landscaping and lighting. Amended in 1984 to provide financing for a broad range of parks, recreation, open space land acquisi-

tion, development and maintenance functions.

Mosaic. A pattern of vegetation made up of a mix of stands or groups of plant species rather than a mix of individuals.

Oak Woodland. A plant community occupied by tree species including blue oak (*Quercus douglasii*), coast live oak (*Quercus agrifolia*), black oak (*Quercus kelloggii*), valley oak (*Quercus lobata*), oregon oak (*Quercus garryana*), california buckeye (*Aesculus californica*), and bay laurel (*Umbellularia californica*), and existing in a “mosaic” with other plant communities.

Open Space Land. Any parcel or area of land or water that is essentially unimproved and devoted to an open space use for the purposes of (1) the preservation of natural resources, (2) the managed production of resources, (3) outdoor recreation, or (4) public health and safety.

Overlay. A land use or zoning designation that modifies the basic underlying designation in some specific manner.

Prescribed Burning. The use of fire as a management tool under specified conditions for burning a predetermined area.

Quimby Act. A specific requirement of the Subdivision Map Act which a city may impose by local ordinance on a residential subdivision requiring park land dedication or fees in lieu thereof for park or recreational purposes.

Regional Planning. The formulation of goals, policies, objectives and implementation measures that address the future growth and development of a broad geographic area.

Regional Park. An area of land or water, usually of 500 or more acres, that possesses outstanding natural features and many outdoor recreation opportunities for the enjoyment and education of the public.

Riparian Corridor. Lands comprised of the vegetative and wildlife areas adjacent to perennial and intermittent streams. Riparian areas are delineated by the existence of plant species normally found near freshwater.

Ridgeline. A line connecting the highest points along a ridge and separating drainage systems from one another.

Right-of-way. A strip of land occupied or intended to be occupied by certain transportation and public use facilities, such as roadways, railroads, and utility lines.

Single-loaded Road. A roadway in which development or other improved facilities occupy only one side of the road.

Staging Area. An area containing facilities for individual or organized hiking or riding activities, usually located at starting points for these activities. The sites may include parking facilities, restrooms, picnic tables, and drinking water.

Specific Plan. A complement to the general plan, it is used in a more specific geographic area, where it combines in one document the planning objectives for the area and implementation techniques necessary to achieve them.

Subdivision. The division of a tract of land into defined lots, either improved or unimproved, which can be separately conveyed by sale or lease, and which can be altered or developed.

Watershed. The area drained by a stream or river system.

Water Table. The upper limit of a portion of the ground saturated with water.

Wetland. An area with soils that are usually saturated with water, and support mostly water-loving plants.

Wildlife Corridor. Planned connections between fragments or “islands” of habitat that provide protected movement opportunities and increased range for various animals.

Zoning. The division of a city or county by legislative regulations into areas or zones, that specify allowable uses for real property and size restriction for buildings within these areas; a program that implements policies of the General Plan.

APPENDIX B

East Bay Regional Park District Master Plan Policies

Open Space Planning Policies

The District will take an active role in the preservation of non-park open space (open space for managed production of resources such as forests, farmlands, etc. and open space for public health and safety, such as earthquake fault zones and flood plains) by participating with citizens and public agencies in resolving the issues of financing, responsibilities, and jurisdiction of the EBRPD and other involved governmental agencies.

Regional Open Space Purpose

A Regional Open Space places in public ownership significant undeveloped areas and preserves their pastoral visual qualities. Open space lands may be used for passive recreational activities that do not require substantial facilities or improvements, or, secondarily for agriculture. Lands that may be opportunity acquisitions, easements, or gifts that the Master Plan has not already identified as potential parklands and that could be beneficial for the District will be placed in this classification.

Minimum Standards

To be considered as a Regional Open Space, an area must have one or more of the following characteristics:

Possess open space and agricultural values that make control by a public agency desirable.

Be a land unit that has (or has the potential for) logical and definable boundaries, which the District can effectively and efficiently operate for

public purposes. The unit should occupy a minimum of 200 acres with a potential of increasing in size to become a larger contiguous unit. However, the District may consider smaller parcels as part of a plan for ultimate dedication to this minimum size.

Be a gift of real property that has the potential for self-sufficient operation through grazing or other appropriate resource management programs that maintain or improve land productivity.

Involve regionally significant ridges and streams and either riparian features that are located by shoreline and associated bluffs or some other notable features of the landscape.

Regional Trail Purpose

A Regional Trail provides a linear corridor, in a natural setting where possible, that is primarily for pedestrian, equestrian, and bicycling uses. Regional Trails provide links between parks, local trails, and urban communities.

Minimum Standards

To be considered as a Regional Trail (internal park trails, or feeder trails, which are not part of the Regional Trail Plan, are excluded), an area must possess the following characteristics:

Have a potential linear corridor of regional significance that the District can designate as a Trail Link for planning and management purposes. Each Trail Link will be in accordance with the Regional Trails Plan and should accomplish at least one of the following goals:

Provide nonmotorized access to a shoreline area or to a parkland of regional scale (such as those provided by the District, the East Bay Municipal Utility District, the San Francisco Water Department, the California

State Park System, or the National Park Service) for a major population center or mass-transit terminal.

Provide a connection between parklands of regional scale (as just defined), especially between those that provide overnight camping.

Provide a day-use loop or link through other regional significant scenic lands - either inland or along shorelines.

Provide a regional water trail with landing and launching sites as well as amenities that connects regional and public facilities along the San Francisco Bay Shoreline and delta for appropriately sized small water craft.

Have adequate land area available at strategic locations suitable for staging or compatible trail recreation activities. The District will designate these areas as Staging Units for planning and management purposes.

APPENDIX C

East Bay Regional Park District References for More Detailed Information

1. A Trail Manual for the East Bay Regional Park District. October, 1976.
2. East Bay Regional Park District Fuel Break Plan. July, 1989.
3. Master Plan 1989. East Bay Regional Park District.
4. Draft Range Management Policies and Guidelines. East Bay Regional Park District. 1990.

U.C. BERKELEY LIBRARIES



C124922212

